



City and County of Honolulu
Department of Environmental Services
Refuse Division

Quarterly Status Report on Reducing and/or Continuing the Use of Waimanalo Gulch Sanitary Landfill

April 13, 2021 10:00 am



LUC Order

- ENV holds a public hearing every three months in accordance with LUC Order (Docket SP09-403) conditions:
 - *"The Applicant shall report to the public every three months on the efforts of the City Council and the City Administration in regard to the continued use of the WGSL, including any funding arrangements that are being considered by the City Council and the City Administration."*
 - *"The Applicant shall have a public hearing every three months in either Wai`anae, Mā`ili, or Nānākuli to report on their efforts to either reduce or continue the use of the WGSL."*
- Complete LUC Order available at LUC website: <https://luc.hawaii.gov/>



COVID-19 Pandemic

- April 5, 2021 letter: City notified LUC and Planning Commission of the need to hold this meeting remotely via WebEx
- Meeting room at Kalanianaʻole Beach Park in Nanakuli still closed to the public
- City to resume meetings at Kalanianaʻole Beach Park when the meeting rooms reopen

Notices and Q&A

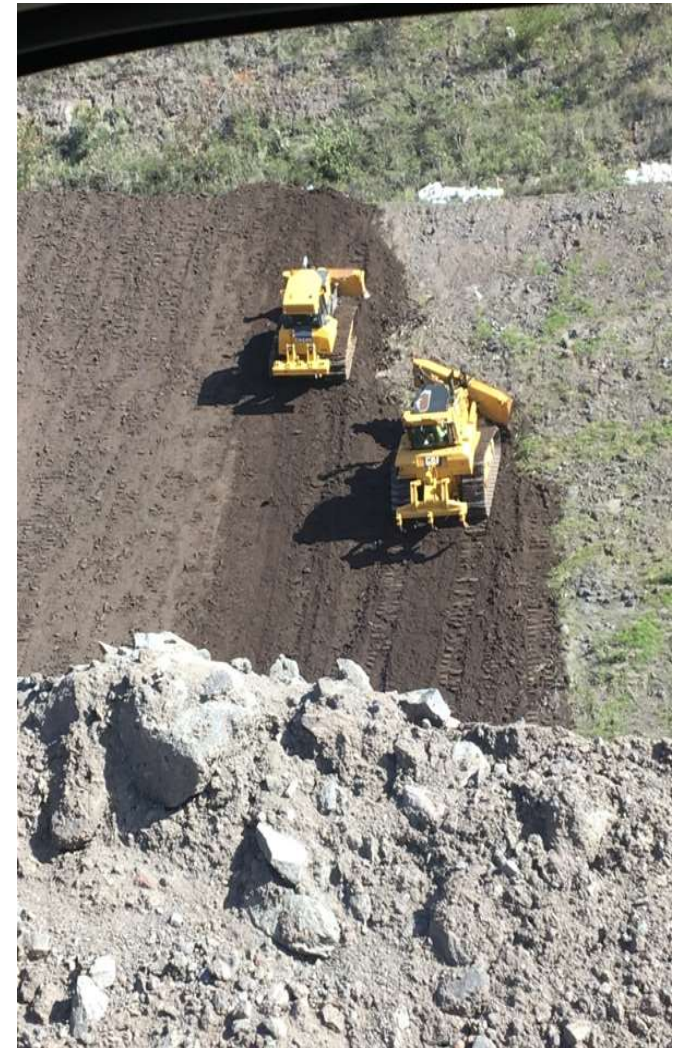
- Posted March 30, 2021
 - Honolulu StarAdvertiser
 - City's Refuse Division Website: www.Opala.org
- Questions and Answers:
 - Use Chat Box to provide comments and questions during meeting
 - E-mail comments and questions to disposal@honolulu.gov within 30 days of each meeting
- Meeting notes updated and posted on website, includes Q&A

Virtual Tour: Waimanalo Gulch Sanitary Landfill (WGSL)





More Like a Quarry
than a Landfill



Ash Disposal



Householder Dropoff and Cleanout Area

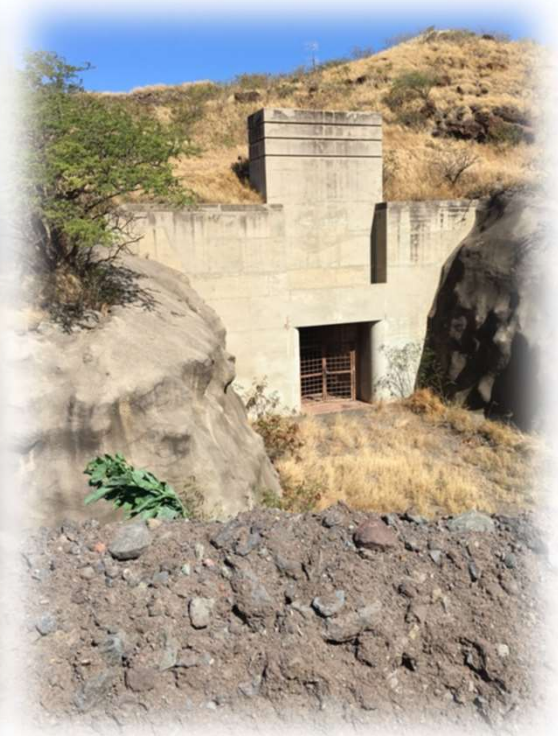


Ash Disposal (Back of Landfill)



So Much More Than a Landfill

- Services residents (300/mo)
- Battery Arizona- historic site
- Pohaku Stones- cultural site
- Kahe Point- NOAA whale counts
- Public Education: “Tour de Trash”



Future Landfill Siting and WGSL Closure

- 2008: City filed application for new SUP (SP 09-403) to use 92.5 acres more at WGSL and to operate to capacity
- November 1, 2019: SUP approved by LUC with conditions:
 - *“By no later than December 31, 2022, the Applicant shall identify an alternative landfill site that may be used upon closure of WGSL.”*
 - *“WGSL shall close by no later than March 2, 2028. The WGSL shall not accept any form of waste after March 2, 2028.”*

Progress Towards Another Landfill Site

- District Boundary Amendment (DBA): ENV following HRS CH. 343 to determine format of environmental review before submitting DBA application for WGSL
- Act 73: Among other things, prohibits construction, modification, or expansion of waste disposal facilities without first establishing a buffer zone of no less than one-half mile
- Down to four sites from 2017 report using a preliminary GIS zoning review (Keaau, Upland Kahuku 1, Upland Pupukea 1 and Upland Pupukea 2)
- ENV re-evaluating sites including but not limited to the sites identified in the 2012 and 2017 reports
- Although not required, the active area of WGSL already complies with Act 73

Act 73's Effects PVT and WGSL

- PVT Landfill Expansion denied
- PVT may be closing in 5 to 9 years
- January 1, 2021: PVT no longer accepts asbestos containing material (ACM)
- WGSL obtained DOH approval and is accepting ACM one day per week (Wednesdays) as of January 6, 2021.
- If/when PVT closes, WGSL may need to accept C&D waste that had been going to PVT

Landfill Airspace is Priceless

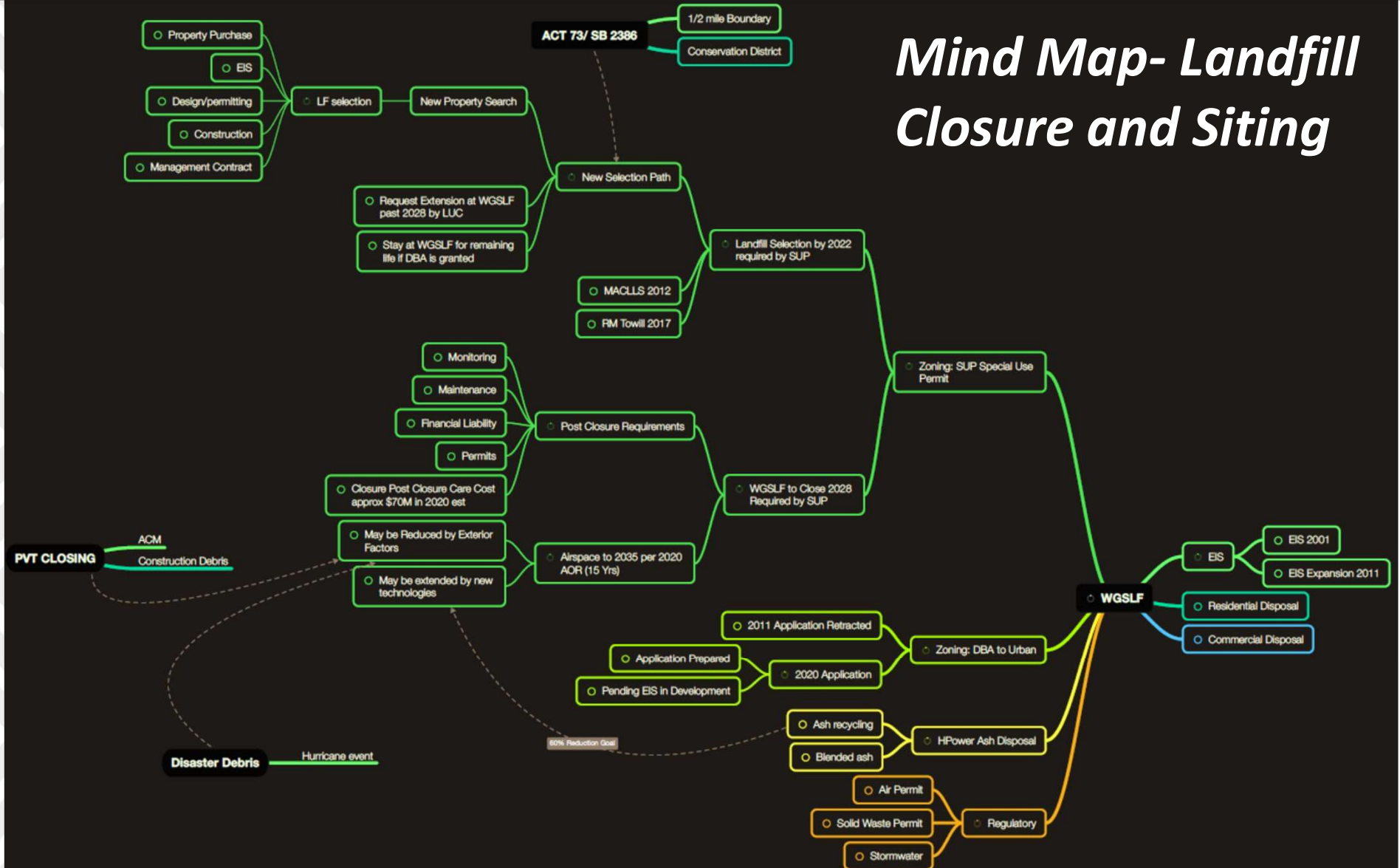
- Closing a landfill that still has airspace not normally done
- WGSF still has 5M cu yd or 15 years of capacity
- In 2028, at current disposal rates, could have 2.5M cu yd remaining
- Sunk cost: \$254M spent on Waimanalo Gulch (1990-2020)
- Initial cost of closure: \$55M
- Post closure care costs for 30 years: \$15M
- Cost of developing new landfill: ~\$100M minimum



Future Landfill - Challenges

- Environmental justice concerns exist everywhere
- Takes minimum 10 years to site, permit and develop a new landfill
- EIS alone could take at least 4 years
- Exploring additional sites but Act 73 has severely limited options

Mind Map- Landfill Closure and Siting



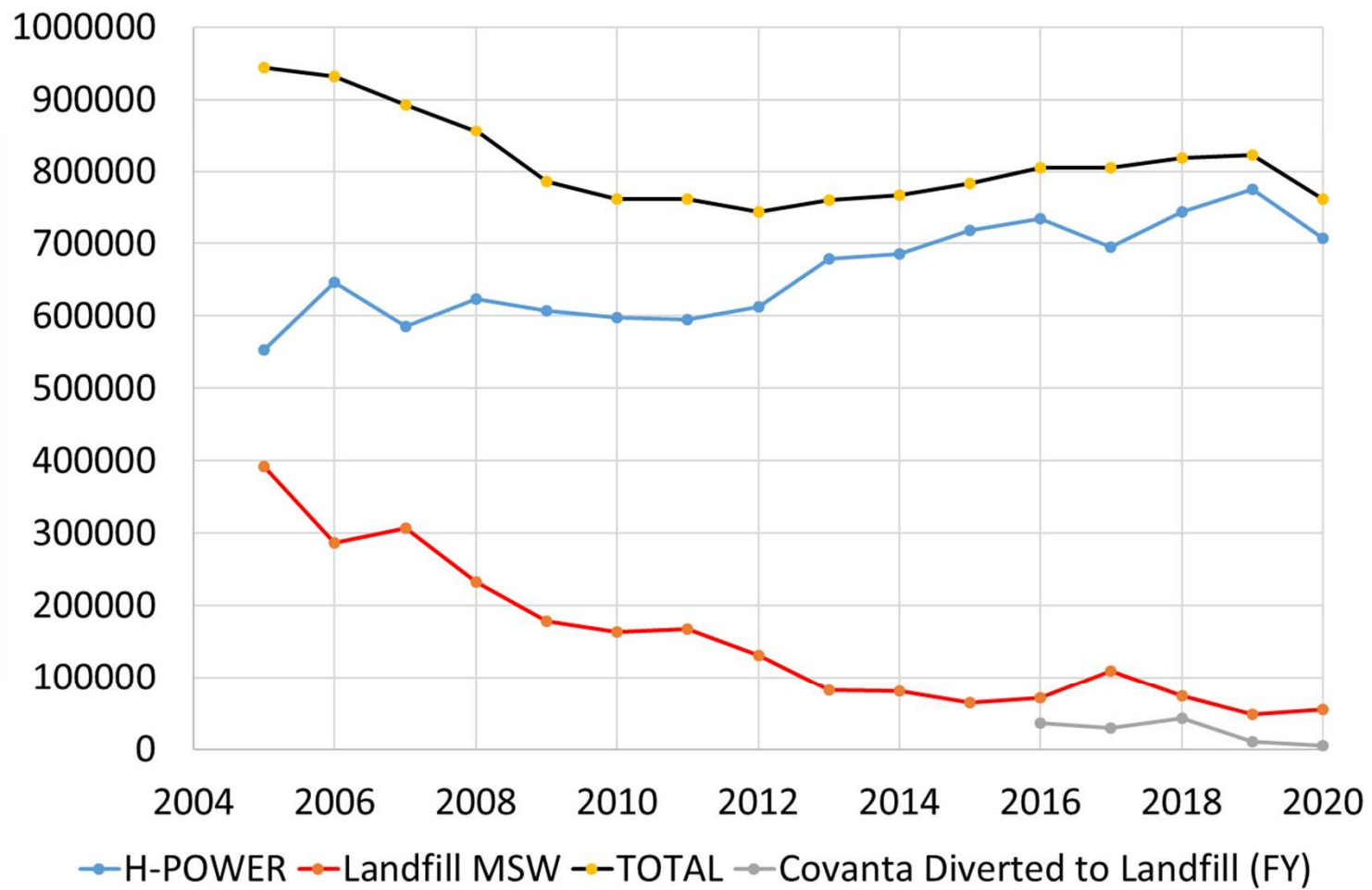
WGSL Operations Updates

- Tonnages:

MONTH	MSW*	ASH	RESIDUE
January 2021	3,980	12,757	3,282
February 2021	13,016	8,264	4,007
March 2021	4,177	11,817	3,439

- During the reporting period, there was one odor complaint received from Ko Olina on February 17, 2021. The investigation did not detect odors at the Ko Olina entrance station or the landfill fenceline

Annual MSW Tonnage



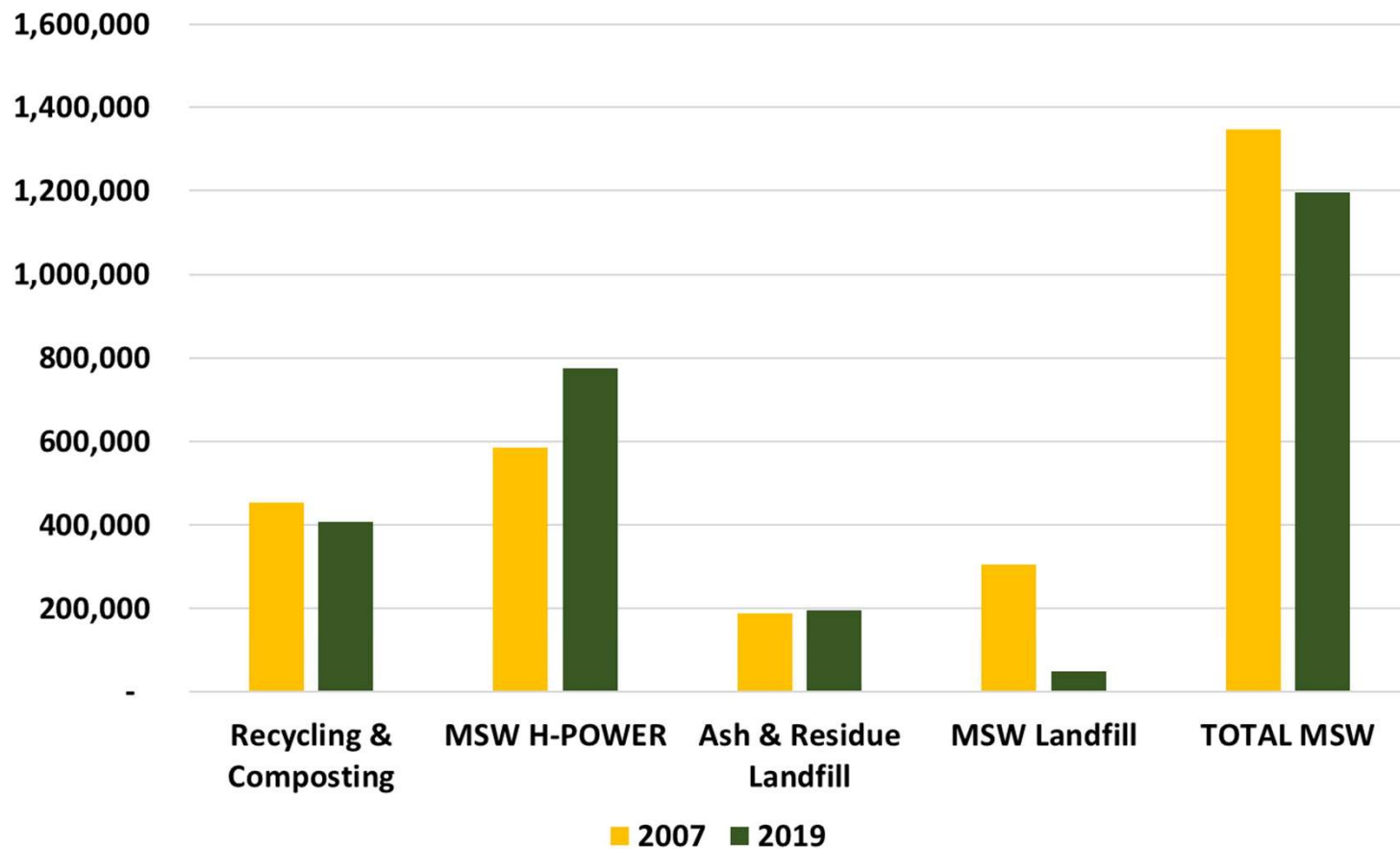
Landfill MSW Down 85% since 2007

- Economic recession 2008
- Since 2012 diverted:
 - Bulky items
 - City tires
 - Sludge
 - Petroleum contaminated soils
 - Expired food waste
 - Treated medical waste
 - Householders with combustible items

Landfill Still Needed For:

- H-POWER ash and residue (200,000 tpy)
- ASR (35,000 tpy)
- WWTP grit/bar screenings (1,000 tpy)
- Public with rock, dirt, concrete (300/mo)
- Dead animals
- HECO/refinery sludges
- Medical waste sharps
- ACM (5,000 tpy) as of Jan 1, 2021
- C&D waste diverted from PVT Landfill (future)
- Disaster Debris

Source Reduction & Landfill Diversion Progress





“Moving the Needle”

- MSW tonnage is a leading indicator of the economy
- 2007 (before recession) vs. 2019 (before COVID-19)
- Trends:
 - 10% reduction in overall MSW (measure of source reduction)
 - 85% reduction in MSW landfilled (measure of landfill diversion)
 - LF diversion rate increased from 63% to 82%

H-POWER Updates

- Mobile baling equipment was tested in March 2021
- DOH approval pending for operation and storing of bales
- Anticipating 75,000 tons MSW landfilled in 2021
 - 25,000 tons higher than 2020
 - Due to once in 6-year major overhaul of TG #1
- Future planned projects (infeed improvements, a common steam header and second dump condenser) intended to further reduce the amount of MSW diverted to landfill during maintenance outages

Recycling Updates

- Disposable Food Ware Ordinance (DFWO): Ordinance 19-30
- Effective January 1, 2021
- City provided an additional 90-day “Education Period” from January 1 to March 31, 2021.
- Intent is to protect human safety and welfare and to improve environmental quality on the island, in the neighboring marine environment and globally
- DFWO affects all food vendors and businesses
- DFWO amends Plastic Bag Ban and restricts the use and sale of polystyrene foam food ware, disposable plastic food ware and disposable plastic service ware. It also dictates when disposable service ware may be provided.



Bills and Resolutions Updates

20-292

Efficiency improvements at drop-off facilities

Adopted 12/9/20

98 (2020)

Food waste recycling

Passed first reading 1/27/21

62 (2020)

Food waste collection

Postponed in committee 3/22/21



Questions and Answers